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November 10, 2009

Ms. Marlene Dortch Secretary Federal Communications Commission 445 12th Street, SW Washington, DC 20554

Re: CTIA Petition for Declaratory Ruling, Docket 08-165

Ex parte communication pursuant to Section 1.1206 of the Rules.

Dear Ms. Dortch:

Submitted herewith on behalf of Montgomery County, Maryland are documents in partial response to the letter of this date filed by CTIA in the referenced docket.

Very truly yours,

MILLER & VAN EATON, P.L.L.C.

OF COUNSEL:

JAMES R. HOBSON

GERARD L. LEDERER

WILLIAM R. MALONE

By

Gerard L. Lederer



Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of

Petition for Declaratory Ruling to Clarify Provision of Section 332(c)(7)(B) to Ensure Timely Siting WC Docket No. 08-165

DECLARATION OF MARJORIE L. WILLIAMS

I, Marjorie L. Williams, declare as follows:

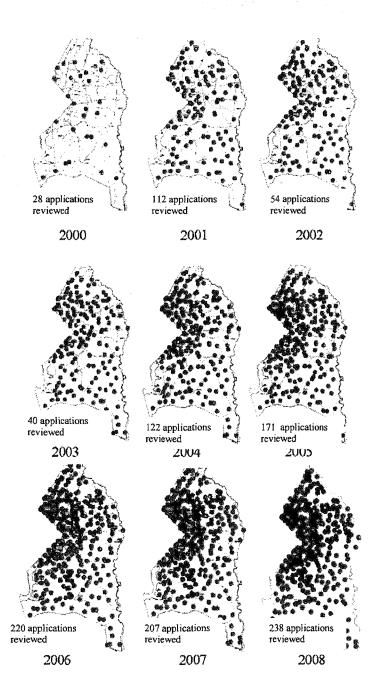
- I am the Chair of the Transmission Facility Coordinating Group (TFCG) for Montgomery County Maryland. I reside at 19209 Forest Brook Road, Germantown, Maryland 20874.
 My work telephone number is 240-777-3762.
- 2. I have read the affidavit of Edward Donohue in which he stated: "In Montgomery County, Maryland, each and every application for a wireless facility, whether new construction, collocation on existing infrastructure or upgrades to existing cell sites must be reviewed and heard by three (3) distinct review boards..."
- 3. As Chair of the TFCG, not all application must be reviewed and heard by three review boards. Most applications are processed and recommended by the TFCG. In particular, most collocations and requests for modifications to existing facilities are processed by the TFCG alone.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief, and that this declaration was executed on the hof November, 2009, in the County of Montgomery, Maryland.

larjorie L. Williams

EXHIBIT A

Exhibit A: Locations of Antennas In Prince Georges County



Year-to-Date 2009 – 175 applications reviewed.



Effect of the New 'Rev G' Structural Standard on the Wireless Industry

Here are some stepping stones you can use to avoid puddles of confusion as adoption of the standard progresses across state and local jurisdictions.

by Edward A. Gazzola, M.Eng., P.Eng.

The new "Revision G" structural standard is becoming law in many states and local jurisdictions across the country, and with it comes a ripple effect that will affect those involved in the wireless industry (carriers, tower owners, structural-engineering firms, site-development firms, and companies buying or selling towers, to name a few). Towers that once passed a structural review may now fail, and towers that once failed a structural review may now pass. The following information should demystify this change that is about to sweep through our industry with a particular focus on what to expect and recommendations for preparing for it.

Adoption of the "Rev G" standard

The new "Revision G" structural standard, TIA-222-G: Structural Standards for Antenna Supporting Structures and Antennas, became effective on Jan. 1, 2006. It was created under the auspices of the Telecommunications Industry Association in cooperation with the American National Standards Institute. It is the seventh revision to the standard since its first release in 1949. It is also the first revision in 10 years and contains the most significant industry-affecting changes since the fourth revision in 1987.

Like any industry-produced technical standard, it is not enforceable until it has been adopted as part of state or local building codes. In the first year following its release, only one state officially adopted the new standard-Florida, in December 2006. Although several states

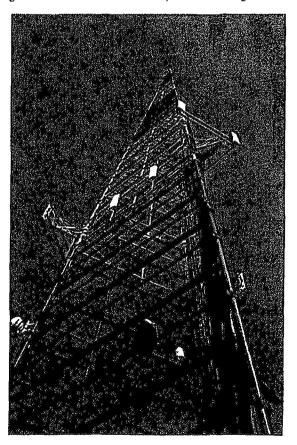
and local jurisdictions were anticipated to adopt Revision G this past summer, others may take several years to adopt the standard into law. It is also possible that some jurisdictions may never adopt the new standard. For companies working in multiple states, the next several years may be confusing for all involved.

New vs. old standard

So what are the big differences between the preceding standard, "Revision F," and the new standard, "Revision G"? The following summarizes, in non-technical language, six major changes:

1. Change in design philosophy

- The approach for structural analysis of a tower has now been made consistent with the approach used for analyzing other structures, such as buildings and



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40 above ground level







bridges. Because of this change in philosophy, all the formulas engineers use for analysis have now changed, and may produce different results than in the past.

- 2. Modified wind loads The approach used for determining the wind load on a tower has changed, again to be consistent with other structures. Rather than using the average speed of one-mile of wind, the highest gust over a three-second period is now used, thus potentially changing the wind load applied to a tower.
- 3. Mandatory ice loads Currently, tower owners decide whether or not ice loads should be considered and to what extent. Historically, zero to one-half inch of radial ice was used. Under Revision G, ice loads are now mandatory and can vary from zero inches to one-and-ahalf inches, thus potentially adding more load to the tower.
 - New site-condition factors A

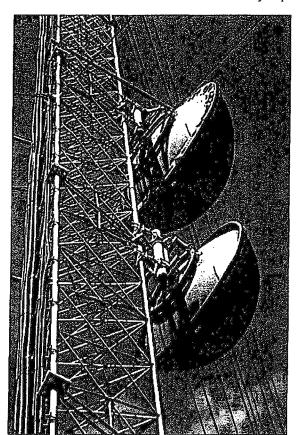
new "exposure and topographic" factor has been added to the standard to address local site conditions. Towers located in open and exposed terrain, or on hilltops, are more exposed to local winds, and factors are now applied to increase the wind load to accommodate these conditions.

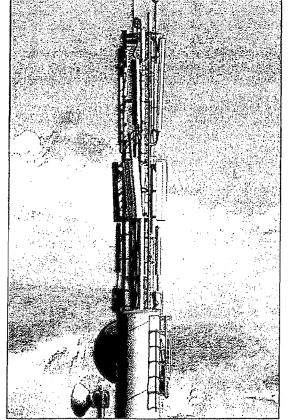
- 5. New risk-of-failure factors A new "structure classification" factor has been added to address any increased risk to life or property in the specific location of the tower or to identify a tower that cannot afford to endure a loss of service; i.e., essential communications. There are now three classes of importance factors that can affect tower loading. Some counties have already made this increased factor mandatory, thus increasing stresses.
- 6. New seismic (earthquake) loading considerations - Seismic analysis, as it applies to towers, is now a mandatory requirement. This condi-

tion rarely governs for most towers; however, this new requirement may affect some towers in seismic areas.

The new standard has numerous other changes and additions, such as site-specific soil conditions, foundations, tower safety and antenna mounts. However, the foregoing are the major ones. In general, the analysis of towers is now more specific to site and tower types. So, what kind of result should we expect?

Although the new standard is not expected to generate significantly different results over the entire population of towers in the country, differences will appear in site-specific applications of the new standard. For example, due to local site conditions, Florida is seeing increased tower stresses. Thus, there is no means of forecasting results on a specific tower until a full structural analysis is conducted.





October 2007

41







nower system protection

Confusion expected

As with any significant industry change, a certain amount of confusion is expected. Those involved can expect the following:

There may be misunderstandings when dealing with municipal building

It is incumbent on all participants in the

wireless industry to educate themselves

on these changes and prepare their

organizations accordingly.

dations to assist those involved in the industry to prepare for this change:

 Educate your project and construction managers on the changes and their effects.

> • Consider preparing for increased build time due to delays in data-gathering, analy-

sis, permitting and upgrades.

•Be aware that tower owners may need to unexpectedly upgrade certain towers.

departments.

- Some towers with reserve capacity under Revision F could now fail, and some recently reinforced towers could now pass.
- •Potentially, more information, time and cost may be required to conduct a structural analysis.
- There may be increased upgrade costs for certain towers or in certain geographic areas.

Much of the confusion will be because of uncertainty around the timing of when and how the new standard will be adopted in each jurisdiction and sitespecific results.

How do we prepare ourselves?

The following are some recommen-

Tower owners

- ·Educate your sales teams on these changes to allow them to better explain the sometimes non-intuitive results to their customers.
- ·Establish internal policies on your approach to conducting structural analysis due to the timing around adoption of Revision G.
- Inventory your existing site documentation and identify potential problem sites in advance, as some of the effects and delays are predictable.

Structural engineering firms

The standard is new and software upgrades are new, so check your

results manually.

- Modify internal tools and systems to minimize delays for your clients.
- Plan extra time to explain unexpected results to your clients.

Site acquisition and development firms

- Don't skip over towers that you "know" failed last time; they may pass this time.
- Do your research on local building departments-which standard has been adopted and if there are any modifications.
- Consider factoring-in potential delays to the build plan.

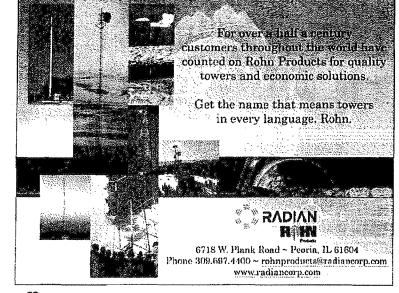
Companies buying or selling towers

- The value of the asset has changed because every specific tower's reserve capacity in the portfolio has changed.
- Involve a tower engineer in the transaction to provide guidance.
- Consider the portfolio as a number of individual assets and not as a whole (law of averages).

Preparation is key

The Revision G structural standard will soon become law in many states and local jurisdictions across the country, while other jurisdictions will be slower to adopt it-or might never do so. Towers that passed under the old standard may fail under the new standard, and vice versa. It is incumbent on all participants in the wireless industry to educate themselves on these changes and prepare their organizations accordingly. The adoption of this state-of-the-art standard, one that is consistent with other industry standards, is the right thing to do, but it may cause considerable pain along the way. As Julius Caesar said, "It is easier to find men who will volunteer to die, than to find those who are willing to endure pain with patience."

Gazzola is president of Atlanta-based Morrison Hershfield. The engineering firm has been an active member of the TIA/EIA-222 Tower Standard for the past 20 years, as well as other international tower standards.



42 above ground level

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Use Wireless Technology to Protect Towers As They Age

'Free Coffee Tomorrow,' the sign says, posted in some restaurants across North America.

By David J. Southern. P.E.

Have you seen the joke? "Free Coffee Tomorrow." As soon as tomorrow comes, well, another tomorrow is on the horizon, with the renewed promise of free coffee. When tomorrow comes for many guyed towers that are at risk for corrosion damage, the consequences may be anything but free.

Tragic events involving anchor failures with guved towers are drawing mostly regional interest with primarily minor property damage and some injuries. However, as evidenced in the aging buried metal industries, it may only be a matter of time before more serious consequences catapult this guyed tower anchor corrosion to the forefront of national telecommunications industry news. Consider tragic corrosion events such as the Carlsbad pipeline explosion (www.corrosiondoctors.org/Pipeline/Carlsbad-explosion.htm) or the Alaska pipeline shutdown (www.washingtonpost.com/ wp-dyn/content/article/2006/08/07/ AR2006080700131.html).

These tragic corrosion events led to new regulations in 2002 and 2006 within the federally regulated interstate transportation industry effectively stiffening regulatory oversight, inspections, reporting and certification of reports by senior company officers. As a result of the new laws, for the first time in history, company employees and officers are receiving jail time for negligence in corrosion practices and poor operating procedures.

North America's aging assets

Many of North Americas 30,000 guyed towers are celebrating their 20th birthday, as is the protective anchor coating that helps to keep them standing. Whether protected with a painted coating or a galvanized coating, these protective systems are nearing their expected lifespan, placing the future of many guyed towers at potential risk. The unseen danger to these giant structures is the corrosion often undetected several feel below ground level, making it almost impossible to inspect.

When the protective coatings fail, it is only a matter of time before destructive rust and corrosion significantly weaken the tension anchors.

Compounding the corrosion rate of buried metal tension anchors are two factors: new, unfriendly neighbors, and a changing environment.

New, unfriendly neighbors

Guyed tower structures are getting two new, unfriendly neighbors, one above ground and the other below grade.

Urban sprawl is pushing residential developments up the hill in search for more land and a better view, and as a result, increasing the hazardous consequence of a tension anchor failure. In terms of property damage and survivor litigation, catastrophic incident settlements could reach the millions. Towers that used to be in the middle of nowhere are now in the middle of somewhere and the new neighbors are more demanding and unforgiving.

The other unseen danger to guyed tension anchor towers is below ground. New and existing cathodic protection systems designed to protect other buried metal structures can interfere with the protective nature of tension anchor coatings leading to early failure. While most cathodic protection systems are implemented to not interfere with guyed tower structures, they too are getting new unfriendly neighbors that can effect their perfor-

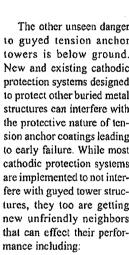
- 1.expanding pipeline operations.
- 2. DC-power mass transit,
- 3. cathodic-protected bridges
- 4. cathodic-protected airport runways
- 5. other cathodic-protected buried metal structures.

To protect both their buried metal assets and their corporate risk profiles, many operators of buried metal structures are resorting to wide-scale deployment of cathodic protection systems and remote monitoring to ensure their investment in protection and risk aversion stays on line full time.

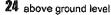
Changing environment

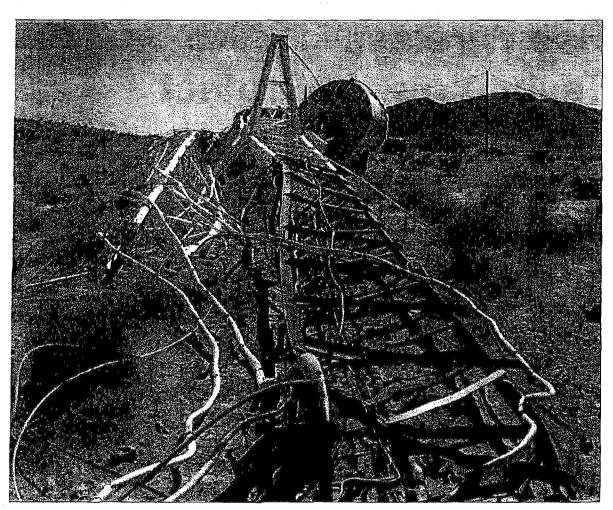
Whether you believe in global warming or not, many believe weather patterns

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No one wants to come to a tower site to investigate an outage and find this: a mangled tower sprawled across the ground. As towers age, corroded guy anchors pose an ever-increasing risk leading to tower collapse.

are changing in one way or another. In most cases, annual rainfall patterns and dry periods are changing and this natural phenomenon can lead to changes to corrosion attack on buried tension anchors. The change in corrosion is usually not for the good. Ground moisture is one of the four elements needed to create a galvanic corrosion cell on tension anchors and if annual rainfall patterns change, so does the corrosion potential.

Some regional environmental changes in North America include high wind areas with record-setting wind speeds that can structurally load a tower to premature failure in the event of advanced unseen anchor corrosion.

Solutions

To ensure adequate protection of guyed towers a two-tiered corrosion prevention system is suggested. First install pre-engineered, passive sacrificial anode corrosion prevention systems providing a solution to all the corrosive conditions that might pose a threat to tower anchors. The sacrificial anode systems re-direct corrosion away from where it is not wanted and can provide superior anchor protection for 10 to 20 years.

To ensure the sacrificial anode systems operate as intended throughout their lifespan and are not subject to changing interference or environmental conditions. it is recommended the solution also

include a permanent ground reference electrode and test-head to allow for quick and easy measurement to ensure the sacrificial anodes are providing adequate protection to the tension anchors. The systems are easy to install on new and existing towers, and provide protection that meets or exceeds tower industry standards and National Association of County Engineers (NACE) recommendations.

Within the past 20 years, remote advanced corrosion protection systems were put in place to help extend the life of guyed tower tension anchors. However, due to the often-remote location of the systems, they fell into disrepair and became increasingly difficult to

April 2008





on tension anchor

sacrificial anode test

stations. The number

of CP RMU radios

installed per tower depends largely on

the height of the tow-

er, high consequence

to third parties due to failure, number or

tension cables and

the number of known

cathodic protection

systems within the

influence area. The

CP RMU radios

monitor the anchor-

to-soil ground poten-

tial voltage to ensure

the sacrificial anode

system maintains

the tension anchors

at the recommend-

ed -850 millivolt

threshold per NACE

standards. The CP

RMU radios monitor

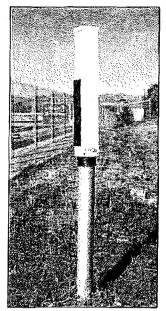
and report the an-

chor-to-soil ground

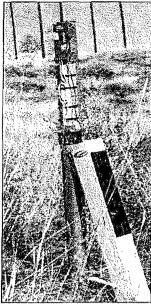
potential values to



endicarolection



metal structures are resorting to wide-scale deployment of cathodic protection systems protection and risk aversion stays on line full time.



Many operators of buried This cathodic protection monitor shows the data radio that monitors the anchor-to-soil ground potential voltage to ensure the and remote monitoring to sacrificial anode system mainensure their investment in tains the tension anchors at the recommended -850 millivolt threshold per NACE standards.

maintain. Now the corrosion protection systems are also aging to the point of needing increased care and monitoring. Adding to the maintenance difficulties are land use restrictions, national security access issues and increased unexpected corrosion rates.

Early cell phone technologies led some companies to try monitoring the corrosion protection systems remotely. However, cost of implementation, spotty cell phone coverage, monthly service plan fees and questionable security restricted the widespread use of wireless technologies to solve this difficult problem.

Fortunately, a new and promising wireless technology was recently introduced into the corrosion protection for guyed towers with the potential to provide remote monitoring for an economical price with no recurring fees or costs.

For maximum piece of mind, a cathodic protection remote monitoring unit (CP RMU) radio should also be installed

26 above ground level

a centrally located office computer, which in turn collects all the anchor-to-soil ground potentials for all the towers. Tower personnel can then remotely monitor the corrosion prevention systems without unnecessary travel, expenses and risk exposure.

Finish the job

For many of the same reasons why towers were constructed in the first place, tower corrosion prevention systems are being deployed today:

- 1. Public safety, company safety and operator safety.
- 2. Reduced operator windshield time, road usage, vehicle maintenance, risk exposure and general liability insurance.
- 3. Reduced operating costs: Operators spend time on vital company functions rather than driving around inspecting what can't be seen.
- 4. Automated and timely status re-
- 5. Timely operational data retrieval

- with enhanced automated trending capabilities and alarming functionality and automated operator notification.
- 6. Enhanced corrosion prevention performance: The systems get worked on in a timely fashion when problems arise, not three months later.

Today, multipurpose, built-for-purpose, all-in-one, corrosion protection remote monitoring, wireless, data communication radios monitor and report corrosion protection operations including anchor-to-soil potential, facility power status, facility interior temperature and backup battery voltage levels. They wire directly to field assets and feed critical tower operation information into existing or supplied company data systems without going outside the company's firewall security protection. The radios are relatively low cost, easy to install, have no licensing fees and no monthly recurring fees.

Each corrosion protection remote monitoring radio also can serve as an infinite data communication repeater site. Adding new radios extends the radio networks' ability to reach further into remote areas, thus enabling additional monitoring of remote compressors, energy fields, oil and gas wells, gas plants, pump stations and water towers.

Many energy and pipeline companies already own other similar radio products, and the new corrosion protection remote monitoring radios easily integrate into these existing systems with minimal investment and a tremendous return on investment.

Consider an advanced corrosion prevention and remote monitoring solution today and perhaps there will be free coffee tomorrow.

Southern is a cathodic protection product development manager with FreeWave Technologies where he is responsible for developing new remote monitoring technologies for corrosion prevention. He has a bachelor of science degree in engineering from the Montana School of mines with advanced education in remote automation. He can be reached at dsouthern@freewave.com or 866-923-6168; www.freewave.com/cp4.

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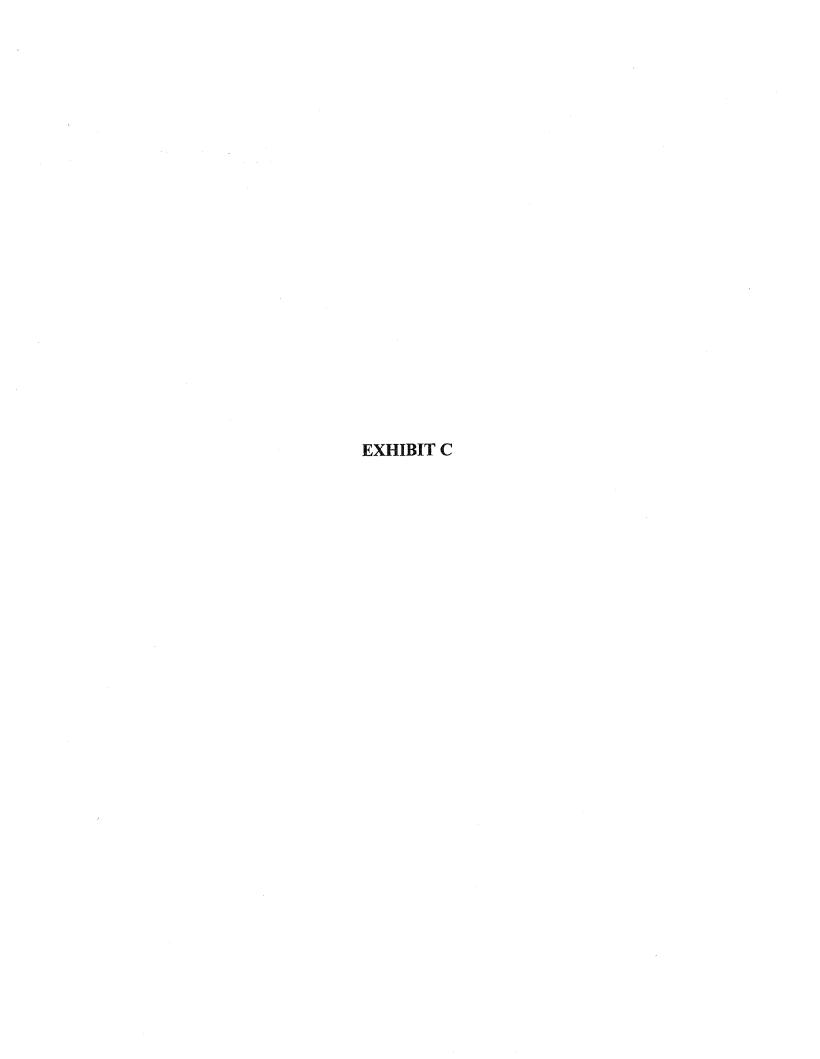


Exhibit C: Monopole Subject to Structural Failure if Additional Attachment Made



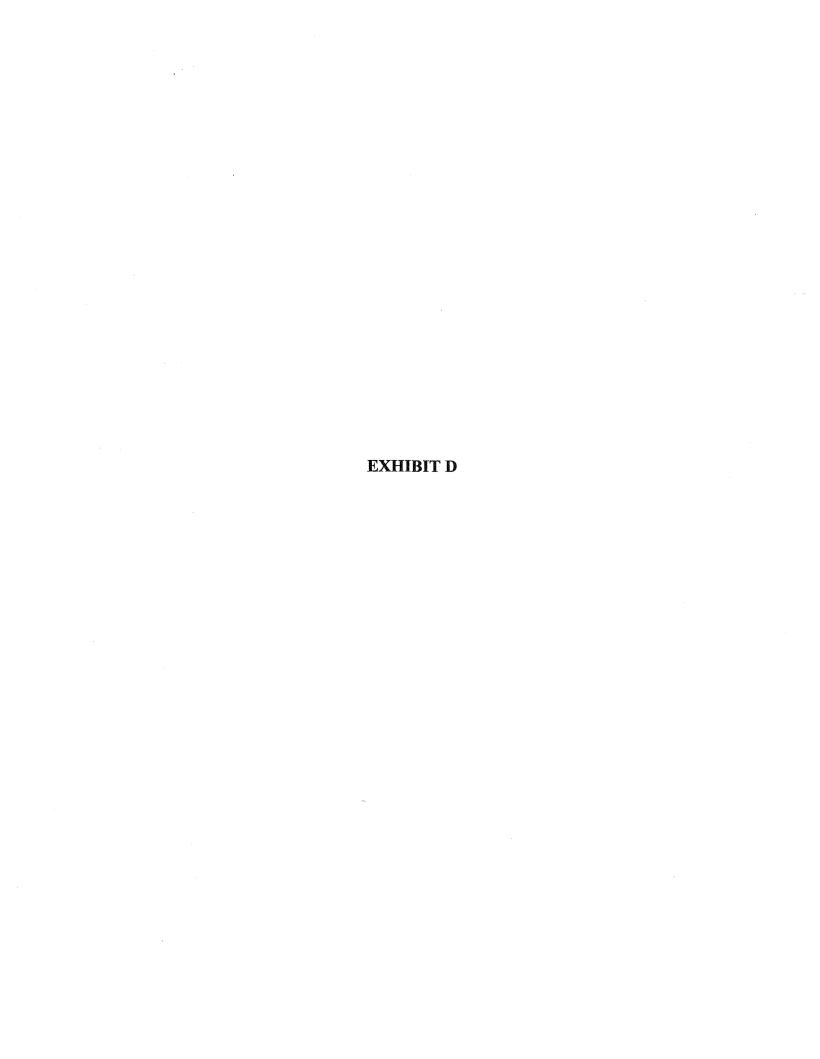


Exhibit D: Monopole at Stadium Requiring Structural Modification

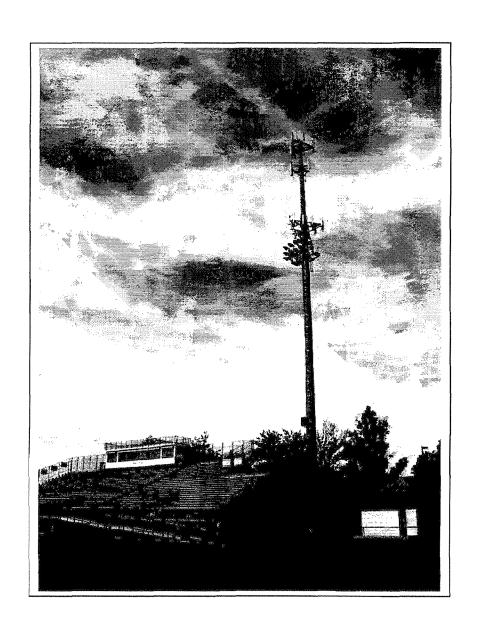


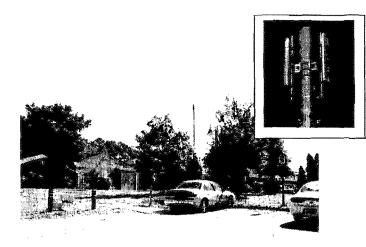
EXHIBIT E

Common problems, errors, and omissions found with Application for Wireless Communications Site Coordination form that can slow processing and delay scheduling before the TTFCG.

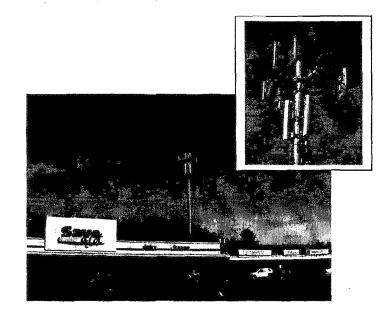
- 1. Missing application form or wrong version of application form submitted most recent version is dated "revised 03/01".
- 2. No vicinity map submitted. Typically a copy of the page from the latest ADC map book with the site identified with an arrow, circle, or other symbol showing where the site is.
- 3. Site plans and elevations do not show placement of existing antennas and related equipment or do not indicate the name of existing carriers.
- 4. RF propagation maps showing area-wide coverage before and after the siting are not always included. Although required for all applications, they are critical for review of any new tower or monopole to be constructed.
- 5. No listing of alternative existing structures within a one mile radius which may have been considered, and an explanation of why those locations could not be used. If there are any existing alternate sites, a copy of RF propagation analysis or results from drive tests will usually be requested if not submitted in anticipation of same.
- 6. Identification of the number of additional carriers a new tower or monopole may accommodate.
- 7. No copy of a structural analysis or structural engineer's certification form to demonstrate safety of attachment on questionable structure such as in cases of attachment to very old facilities or to structures that were not originally erected to support the large antenna arrays necessary for cellular and PCS services. Additionally, if structural capacity is used as justification for why existing structures are not being considered, a structural analysis or similar confirmation is required.
- 8. No copy of an FAA certification review or mention that a request for one has been submitted.
- 9. No current facility location and projected growth plan on file.
- 10. Address not shown or incorrect, missing or inaccurate latitude or longitude locations.
- 11. Conflicting information shown, such as different elevations shown on the application form or cover letter from what is shown on the plans, or differences in number or type of antennas between what is in the application text and on the drawings.
- 12. No heights of buildings, size of equipment sheds, distances from property lines shown on drawings, or in the text, or both.
- 13. No fax or e-mail numbers for contact person.

EXHIBIT F

Exhibit F: Co-Location Causes Substantial Alterations



This monopole was designed by the initial carrier to minimize the visual impact in the community a "slim-line" monopole with flush mount antennas. Over time, the a co-locator added three "T-Arm" standoff support for six additional antennas. The initial carrier replaced the first antennas with larger ones. Most recent co-locator added abbreviated platform to support six more antennas. Structural modifications had to be made to accommodate the latest antenna array. With each successive placement of antennas, the more visually intrusive the structure becomes.



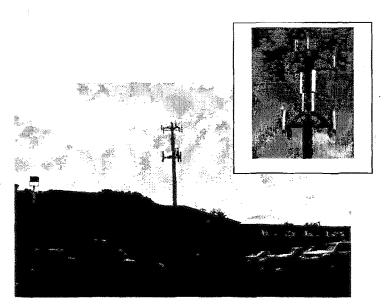


EXHIBIT G

Exhibit G: Loaded Utility Poles

